REMARKS

Applicants have studied the Office Action dated July 7, 2004 and have made amendments to the claims. It is submitted that the application, as amended, is in condition for allowance. By virtue of this amendment, claims 1-22 are pending. Claims 1-3, 5-7, 9, 11-17, 19, and 21 have been amended, and new claim 22 has been added. Reconsideration and allowance of the pending claims in view of the above amendments and the following remarks are respectfully requested.

The title of the invention was objected to as not being descriptive. The title has been amended to be more clearly indicative of the invention to which the claims are directed.

Claims 1-3 and 5-21 were rejected under 35 U.S.C. § 102(e) as being anticipated by Lambert (U.S. Patent No. 6,421,080). Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Lambert. These rejections are respectfully traversed.

The present invention is directed to system and methods for recording images around the instant of the occurrence of an event. One preferred embodiment provides a system for documenting events. As shown in Figure 2, the system includes a camera 1, a memory including a first volatile memory 4 and a second non-volatile memory 5, an arithmetic processing unit 17, and a sensor 3 coupled to the memory. The camera 1 acquires images and produces a video signal, the memory stores images based on the video signal. The arithmetic processing unit 17 certifies each of the images stored in the memory by calculating a digital signature for association with each of the images.

The images and associated digital signatures are stored in the volatile memory 4, and the sensor 3 actives a transfer of the images and associated digital signatures from the volatile memory 4 to the non-volatile memory 5. Because the images are transferred to non-volatile memory based on the sensor and each image is certified by an associated digital signature, there is provided a compact and cost efficient system for permanently saving relevant video recordings

whose authenticity can be shown. This allows the recordings to be reliably used as evidence in a court of law.

The Lambert reference is directed to an image recording system for use with a surveillance system that provides pre-event recording for multiple cameras. However, Lambert does not disclose a system for documenting events that includes an arithmetic processing unit for certifying each image stored in a memory by calculating a digital signature for association with each of the images, and a sensor that actives a transfer of the images and associated digital signatures from the volatile memory to the non-volatile memory, as is recited in amended claim 1. Amended claim 12 contains similar recitations.

Likewise, Lambert does not discloses a method for documenting events in which the digital data corresponding to each image is certified by calculating a digital signature for association with the digital data corresponding to each of the images, the digital data and associated digital signatures are stored in a first volatile memory, and a transfer of the digital data and associated digital signatures from the first volatile memory to a second non-volatile memory is activated in response to the occurrence of an external event, as is recited in amended claim 7. Amended claim 17 contains similar recitations.

Lambert discloses a surveillance system with multiple cameras that provides pre-event recording. In the surveillance system of Lambert, multiple cameras 14 provide video images to a recoding subsystem 12, as shown in Figure 1. The recoding subsystem 12 temporarily stores the received images in a cache memory 32 located within a RAM memory 20. Identifying information such as the date and time, image size, and a camera identifier are stored with the images. Upon detection of a triggering event by a sensor 34, the images stored in the cache memory 32 is copied to a hard drive 22. Thus, in the surveillance system of Lambert, image data and identifying information is transferred from volatile cache memory to a non-volatile hard disk when the sensor is activated.

In contrast, in embodiments of the present invention, image data and associated digital signatures for each image are transferred from volatile memory to non-volatile memory on the occurrence of an event. More specifically, images are acquired with a camera, and digital data corresponding to each of the images is certified by calculating a digital signature for association

with the digital data corresponding to each of the images. The digital data and associated digital signatures are stored in a first volatile memory, and a transfer of the digital data and associated digital signatures from the first volatile memory to a second non-volatile memory is activated in response to the occurrence of an external event.

For example, in one illustrative embodiment the external event is an automobile accident, and an activation signal is produced from an activation sensor of a passenger protection system of an automobile on the occurrence of the accident. Thus, on the occurrence of the external event, the images are transferred to non-volatile memory along with the associated digital signatures that certify each of the images. This allows a compact and cost efficient system to permanently save relevant video recordings of the event. Further, the authenticity of these recordings can be shown through their certification so as to allow their use as evidence in a court of law.

Lambert does not teach or suggest certifying digital data corresponding to each stored image by calculating a digital signature for association with the digital data corresponding to each of the stored images, and transferring the digital data and associated digital signatures from a volatile memory to a non-volatile memory when an external event occurs. Lambert only discloses storing identifying information, such as the date and time, image size, and a camera identifier, with the images. Such identifying information cannot reliably be used to detect alteration of the images because someone altering the images can also alter such identifying information to make the video appear to be unaltered.

In contrast, a "digital signature" is a well known procedure for certifying data. By digitally signing each image through association with a digital signature, any alteration of the images can be detected because the algorithms used to calculate the digital signatures prevent someone altering the images from being able to determine the proper digital signatures for the altered images. For example, a DSA type (Digital Signature Algorithm) digital signature can be associated using public and private keys. The system uses the one key to calculate the digital signature, and the proper person or association possessing the other key can certify the signed images. Nowhere does Lambert teach or suggest certifying store image data by calculating a digital signature for association with each of the stored images.

Applicants believe that the differences between Lambert and the present invention are clear in amended claims 1, 7, 12, and 17, which set forth various embodiments of the present invention. Therefore, claims 1, 7, 12, and 17 distinguish over the Lambert reference, and the rejection of these claims under 35 U.S.C. § 102(e) should be withdrawn.

As discussed above, amended claims 1, 7, 12, and 17 distinguish over the Lambert reference, and thus, claims 2-6, claims 8-11, claims 13-16, and claims 18-21 (which depend from claims 1, 7, 12, and 17, respectively) also distinguish over the Lambert reference. Therefore, it is respectfully submitted that the rejections of claims 1-21 under 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a) should be withdrawn.

Claim 22 has been added by this amendment, and is provided to further define the invention disclosed in the specification. Claim 22 is allowable for at least the reasons set forth above with respect to claims 1-21.

In view of the foregoing, it is respectfully submitted that the application and the claims are in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call the undersigned attorney at (561) 989-9811 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

Date: January 7, 2005

By: _____
Stephen Bongini
Registration No. 40,917
Attorney for Applicants

FLEIT, KAIN, GIBBONS,
GUTMAN, BONGINI & BIANCO P.L.
One Boca Commerce Center
551 Northwest 77th Street, Suite 111
Boca Raton, Florida 33487
Telephone: (561) 989-9811
Facsimile: (561) 989-9812